

Title (en)
OPTICAL SIGNAL PROCESSOR

Title (de)
OPTISCHER SIGNALPROZESSOR

Title (fr)
PROCESSEUR DE SIGNAL OPTIQUE

Publication
EP 2034634 A1 20090311 (EN)

Application
EP 06766925 A 20060619

Priority
JP 2006312264 W 20060619

Abstract (en)
An O/E conversion element (31) converts an input NRZ optical signal into an electric signal. A clock recovery circuit (32) recovers a clock signal from the electric signal obtained by the O/E conversion element (31). A phase modulator (35) applies phase modulation to the NRZ optical signal, using the recovered clock signal. An intensity modulator (36) applies intensity modulation to the NRZ optical signal, using the recovered clock signal. A dispersion medium (37) compensates for a frequency chirp of an optical signal output from the intensity modulator (36). As a result, the pulse width of the NRZ optical signal is compressed, and the NRZ optical signal is converted into an RZ optical signal.

IPC 8 full level
H04B 10/516 (2013.01); **H04J 14/08** (2006.01); **H04B 10/25** (2013.01); **H04B 10/29** (2013.01); **H04B 10/54** (2013.01); **H04B 10/548** (2013.01); **H04B 10/556** (2013.01); **H04B 10/588** (2013.01); **H04B 10/61** (2013.01)

CPC (source: EP US)
H04B 10/29 (2013.01 - EP US); **H04J 14/08** (2013.01 - EP US)

Cited by
WO2011091802A1; CN110677197A

Designated contracting state (EPC)
DE FR GB

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 2034634 A1 20090311; **EP 2034634 A4 20131016**; JP 4733745 B2 20110727; JP WO2007148377 A1 20091112; US 2009097854 A1 20090416; US 8190032 B2 20120529; WO 2007148377 A1 20071227

DOCDB simple family (application)
EP 06766925 A 20060619; JP 2006312264 W 20060619; JP 2008522194 A 20060619; US 34017708 A 20081219